Open Science Follow-up Survey for G7 Science Ministers' Meeting
Response from the UNITED STATES

At the G7 Science Ministers' Meeting in Italy this September, G7 Ministers encouraged the Open Science Working Group (OS WG) to follow up actions taken by G7 members according to the WG's recommendations and to collect good practices, in order to report to the next G7 Science Ministers' Meeting, under the adopted G7 SCIENCE MINISTERS' COMMUNIQUÉ. In particular, the OS WG is expected to deepen its efforts on the following topics: the incentives for openness of the research ecosystem, including the role of research indicators and metrics relevant to open science; and the infrastructures and standards for optimal use of research data. According to these backgrounds, we hereby conduct a follow-up survey, especially by updating the policies and collecting good practices of each country.

Please answer to the questions below. Attaching reference documents and information are highly appreciated.
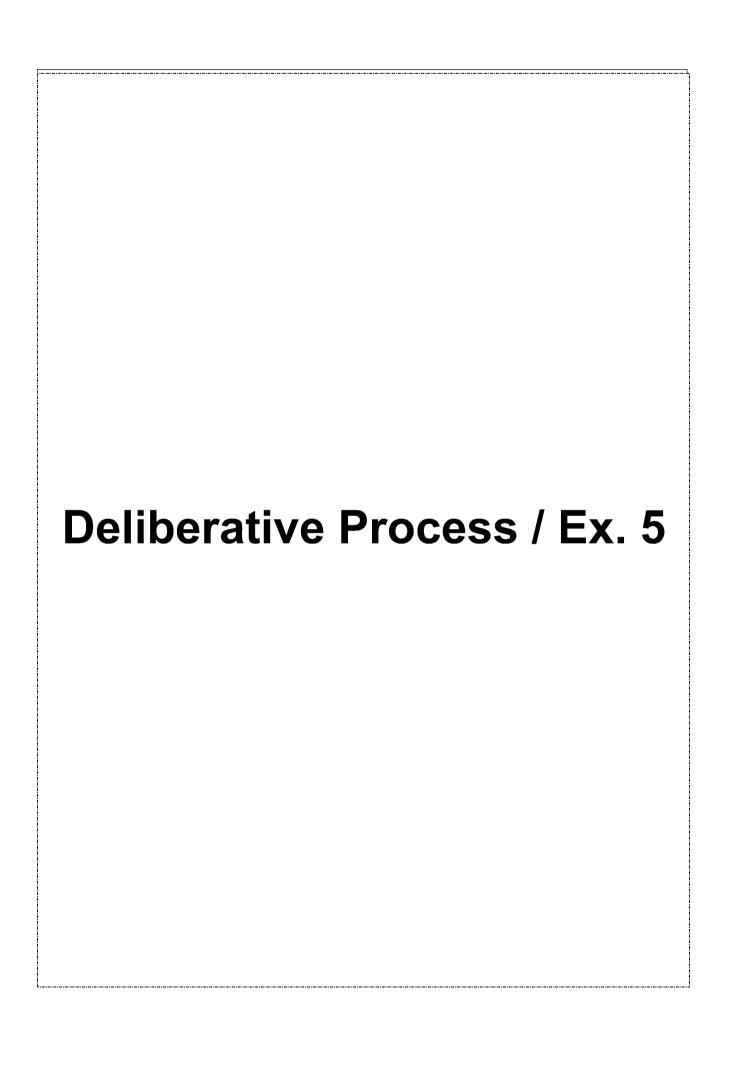
Q1: Overview of National Framework of Policies and Programs supporting Open Science Paradigms
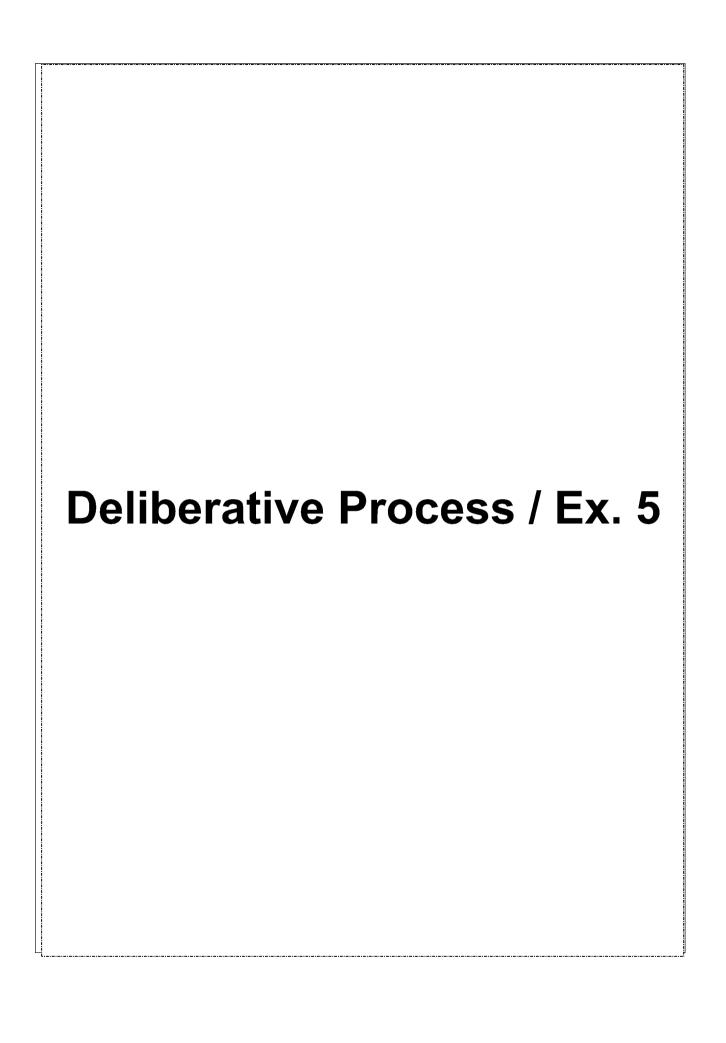
Please describe an overview of governmental policies and programs to promote Open Science Paradigms. It is strongly encouraged to include the purposes, targets and goals (ex: what social impacts are expected?) of such policies and programs as well as information of how (ex: set an article in the law) you position them in the national STI framework of your country.

If there are any challenges to respond as one response at the government-wide level, in view of your country's policy situation for open science paradigms,

(1) please explain the details of the country's situation
(2) and if possible, please describe policies and programs of the ministries/departments and government agencies to promote open science paradigms in your country.

- You can expand the comment box below for longer responses.

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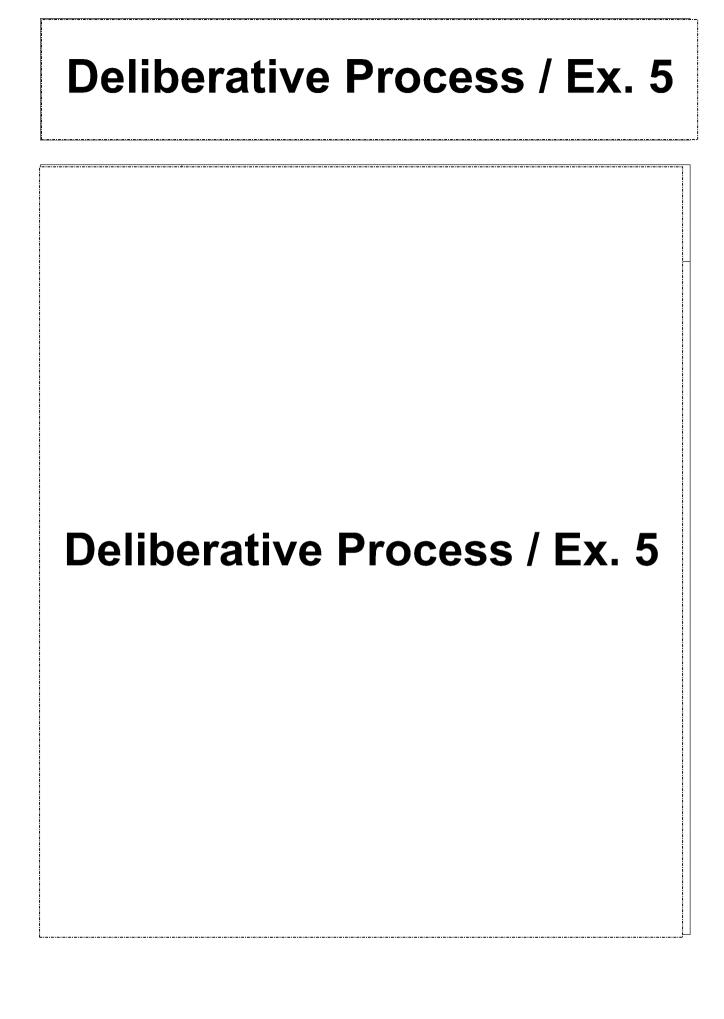# Deliberative Process / Ex. 5

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<u>Q2: Examples of Incentives and rewards for researchers to Promote Open Science Paradigms</u>

In Annex 4 of the Communique, recommendations are stated for each G7 nation, to engage with research stakeholders to identify and implement enhancements to research evaluation and reward systems that take into consideration the Open Science activities carried out by researchers and research institutions. Accordingly, please show and explain your country's examples of incentives and rewards for researchers to promote Open Science relevant to following topics 2A, 2B, 2C, 2D and 2E. Multiple topics can be selected for each example, if appropriate. Please make sure that your description of a content section clarifies how the selected topic(s) are applicable to the corresponding cases.

2A: Recognizing Open Science practices during evaluation of research funding proposals, and research outcomes.

2B: Recognizing and rewarding research productivity and impact that reflect open science activities by researchers during career advancement reviews.

2C: Including credit for service activities such as reviewing, evaluating, and curation and management of research data.

2D: Developing metrics of Open Science practices.

2E: Other than above

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Deliberative Process / Ex. 5

Deliberative Process / Ex. 5

Please describe any budget measurements and/or frameworks (rules, standards, organizations, or any) established for the examples (2A-2E) if you have, and also what they (budget and framework) achieved and what impacts they have on governmental policies, R & D, industry, citizen, education and so on.

\-   You can expand the comment box below for longer responses.

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Please describe any practices, if you have, for utilizing research indicator and/or metrics relevant for evaluation of Open Science activities and their impact on policy, research, industry and/or citizen sectors.

- You can expand the comment box below for longer responses.

Q3: Examples of Infrastructures and Standards for an Optimal Use of Research Data

Each G7 nation is recommended to work to promote the development of practices and the use of technologies and infrastructures in the research community that foster Open Science principles and data sharing. Please show and explain your country's examples of cases, developments, and/or approaches relevant to the following items.

Multiple topics can be selected for each example, if appropriate. Please make sure that your description of a content section clarifies how the selected topic(s) are applicable to the corresponding cases.

  3A: Actions if any, towards use of data management plans as part of new research projects, and

other approaches, as important instruments to ensure data quality along the whole data life cycle, data preservation and access.

3B: Any major activities for development of common interfaces and data standards, including software whenever appropriate.

3C: Actions to support development of plans and approaches for maximizing the accessibility, long-term preservation and reproducibility of research data and results, while protecting privacy, confidentiality, national security, and intellectual property.

3D: Other than above

- Please answer one or more appropriate example(s). If needed, please add extra answer box(es).
- You can expand the comment box below for longer responses.

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Also please provide information about your country's research data infrastructure initiatives. This information will help future communication and forum between G7 members for fostering global coordination of research data infrastructures.

\- You can expand the comment box below for longer responses.

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Q4: Any Other Good Practices That Would Be Worthwhile Sharing

Please provide any information (current status, experiences, and/or ongoing plans) of your country which helps promote open science, research data sharing — e.g. formulating codes of conduct for researchers; workforce development on data management skills (education and training) and encouraging best practice in the use of research indicators and metrics for the evaluation of research.

-        You can expand the comment box below for longer responses.

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